WHAT IS CLAIMED IS:

1. A document filing system comprising:

(a) image input means for inputting page image information of a document;

5   (b) graphic pattern extraction means for extracting a graphic pattern area from the page image information input by said image input means;

(c) graphic pattern layout classification means for classifying the graphic pattern area extracted by said

10   graphic pattern extraction means on the basis of layout classification criteria defined in advance;

(d) information storing means for storing a layout classification classified by said graphic pattern layout classification means upon linking the layout

15   classification to the page image information input by said image input means;

(e) command input means for giving a command to search for page image information by designating layout information of a graphic pattern in the page image

20   information as a rectangle in a frame on a paper sheet;

(f) search processing means for classifying the rectangle in the frame on the paper sheet, which is designated by said command input means, on the basis of the layout classification criteria, and searching for page

25   image information stored upon being linked to the same

layout classification; and

(g)   image display means for displaying the page image information searched out by said search processing means.

5   2.   A document filing system comprising:

(a)   image input means for inputting page image information of a document;

(b)   graphic pattern extraction means for extracting a graphic pattern area from the page image information

10   input by said image input means;

(c)   graphic pattern layout classification means for classifying the graphic pattern area extracted by said graphic pattern extraction means on the basis of layout classification criteria defined in advance;

15   (d)   color acquisition means for acquiring a representative color from the graphic pattern area extracted by said graphic pattern extraction means;

(e)   color classification means for classifying the color from said color acquisition means on the basis of

20   color criteria defined in advance;

(f)   information storing means for linking a layout classification obtained by said graphic pattern layout classification means to a color classification obtained by said color classification means and storing the

25   classifications upon linking the classifications to the

page image information input by said image input means;

(g) command input means for giving a command to search for page image information by designating layout information of a graphic pattern in the page image information as a rectangle in a frame on a paper sheet, and also designating a color for a search with respect to the designated rectangle on the basis of the color criteria;

(h) search processing means for classifying the rectangle in the frame on the paper sheet, which is designated by said command input means, on the basis of the layout classification criteria, searching for page image information stored upon being linked to the same layout classification, and narrowing down the page image information as a search result depending on whether the information is stored upon being linked to the same color classification as that of the color designated by said command input means; and

(i) image display means for displaying the page image information narrowed down by said search processing means.

3. A document filing system comprising:

(a) image input means for inputting page image information of a document;

(b) graphic pattern extraction means for extracting

a graphic pattern area from the page image information input by said image input means;

(c) graphic pattern layout classification means for classifying the graphic pattern area extracted by said graphic pattern extraction means on the basis of layout classification criteria defined in advance;

(d) color acquisition means for acquiring a representative color from the graphic pattern area extracted by said graphic pattern extraction means;

(e) color classification means for classifying the color from said color acquisition means on the basis of color criteria defined in advance;

(f) information storing means for linking a layout classification obtained by said graphic pattern layout classification means to a color classification obtained by said color classification means and storing the classifications upon linking the classifications to the page image information input by said image input means;

(g) first command input means for giving a command to search for page image information by designating layout information of a graphic pattern in the page image information as a rectangle in a frame on a paper sheet;

(h) first search processing means for classifying the rectangle in the frame on the paper sheet, which is designated by said first command input means, on the basis

of the layout classification criteria, and searching for page image information stored upon being linked to the same layout classification;

(i)   first image display means for displaying the page image information searched out by said first search processing means;

(j)   second input means for inquiring whether to narrow down the page image information displayed by said first image display means by colors, and if the information is to be narrowed down by colors, giving a command to narrow down the page image information by designating a color to be searched out with respect to each rectangle on the basis of the color classification criteria;

(k)   second search processing means for narrowing down the page image information searched out by said first search processing means depending on whether the information is stored upon being linked to the same color classification as that of each rectangle designated by said second command input means; and

(1)   second image display means for displaying the page image information narrowed down by said second search processing means.

4. A system according to claim 1, further comprising means for selecting a portrait/landscape orientation of

the paper sheet at the time of a search for the page image information.

5. A system according to claim 2, further comprising means for selecting a portrait/landscape orientation of the paper sheet at the time of a search for the page image information.

6. A system according to claim 3, further comprising means for selecting a portrait/landscape orientation of the paper sheet at the time of a search for the page image information.

7. A document filing method comprising:

(a) the image input step of inputting page image information of a document;

(b) the graphic pattern extraction step of extracting a graphic pattern area from the page image information input in the image input step;

(c) the graphic pattern layout classification step of classifying the graphic pattern area extracted in the graphic pattern extraction step on the basis of layout classification criteria defined in advance;

(d) the information storing step of storing a layout classification from the graphic pattern layout classification step upon linking the layout classification to the page image information input in the image input step;

(e)   the command input step of giving a command to search for page image information by designating layout information of a graphic pattern in the page image information as a rectangle in a frame on a paper sheet;

5   (f)   the search processing step of classifying the rectangle in the frame on the paper sheet, which is designated in the command input step, on the basis of the layout classification criteria, and searching for page image information stored upon being linked to the same

10   layout classification; and

(g)   the image display step of displaying the page image information searched out in the search processing step.

8.   A document filing method comprising:

15   (a)   the image input step of inputting page image information of a document;

(b)   the graphic pattern extraction step of extracting a graphic pattern area from the page image information input in the image input step;

20   (c)   the graphic pattern layout classification step of classifying the graphic pattern area extracted in the graphic pattern extraction step on the basis of layout classification criteria defined in advance;

(d)   the color acquisition step of acquiring a

25   representative color from the graphic pattern area

extracted in the graphic pattern extraction step;

(e) the color classification step of classifying the color from the color acquisition step on the basis of color criteria defined in advance;

5   (f) the information storing step of linking a layout classification obtained in the graphic pattern layout classification step to a color classification obtained in the color classification step and storing the classifications upon linking the classifications to the

10   page image information input in the image input step;

(g) the command input step of giving a command to search for page image information by designating layout information of a graphic pattern in the page image information as a rectangle in a frame on a paper sheet,

15   and also designating a color for a search with respect to the designated rectangle on the basis of the color criteria;

(h) the search processing step of classifying the rectangle in the frame on the paper sheet, which is

20   designated in the command input step, on the basis of the layout classification criteria, searching for page image information stored upon being linked to the same layout classification, and narrowing down the page image information as a search result depending on whether the

25   information is stored upon being linked to the same color

classification as that of the color designated in the command input step; and

(i)   the image display step of displaying the page image information narrowed down in the search processing step.

9.   A document filing method comprising:

(a)   the image input step of inputting page image information of a document;

(b)   the graphic pattern extraction step of extracting a graphic pattern area from the page image information input in the image input step;

(c)   the graphic pattern layout classification step of classifying the graphic pattern area extracted in the graphic pattern extraction step on the basis of layout classification criteria defined in advance;

(d)   the color acquisition step of acquiring a representative color from the graphic pattern area extracted in the graphic pattern extraction step;

(e)   the color classification step of classifying the color from the color acquisition step on the basis of color criteria defined in advance;

(f)   the information storing step of linking a layout classification obtained in the graphic pattern layout classification step to a color classification obtained in the color classification step and storing the

classifications upon linking the classifications to the page image information input in the image input step;

(g) the first command input step of giving a command to search for page image information by designating layout information of a graphic pattern in the page image information as a rectangle in a frame on a paper sheet;

(h) the first search processing step of classifying the rectangle in the frame on the paper sheet, which is designated in the first command input step, on the basis of the layout classification criteria, and searching for page image information stored upon being linked to the same layout classification;

(i) the first image display step of displaying the page image information searched out in the first search processing step;

(j) the second input step of inquiring whether to narrow down the page image information displayed in the first image display step by colors, and if the information is to be narrowed down by colors, giving a command to narrow down the page image information by designating a color to be searched out with respect to each rectangle on the basis of the color classification criteria;

(k) the second search processing step of narrowing down the page image information searched out in the first search processing step depending on whether the

information is stored upon being linked to the same color classification as that of each rectangle designated in the second command input step; and

(1)   the second image display step of displaying the page image information narrowed down in the second search processing step.

10.   A method according to claim 7, further comprising the step of selecting a portrait/landscape orientation of the paper sheet at the time of a search for the page image information.

11.   A method according to claim 8, further comprising the step of selecting a portrait/landscape orientation of the paper sheet at the time of a search for the page image information.

12.   A method according to claim 9, further comprising the step of selecting a portrait/landscape orientation of the paper sheet at the time of a search for the page image information.

13.   A recording medium on which a program is recorded, the program causing a computer to execute:

(a)   the image input step of inputting page image information of a document;

(b)   the graphic pattern extraction step of extracting a graphic pattern area from the page image information input in the image input step;

(c)   the graphic pattern layout classification step of classifying the graphic pattern area extracted in the graphic pattern extraction step on the basis of layout classification criteria defined in advance;

5   (d)   the information storing step of storing a layout classification from the graphic pattern layout classification step upon linking the layout classification to the page image information input in the image input step;

10   (e)   the command input step of giving a command to search for page image information by designating layout information of a graphic pattern in the page image information as a rectangle in a frame on a paper sheet;

       (f)   the search processing step of classifying the
15   rectangle in the frame on the paper sheet, which is designated in the command input step, on the basis of the layout classification criteria, and searching for page image information stored upon being linked to the same layout classification; and

20   (g)   the image display step of displaying the page image information searched out in the search processing step.

       14.   A recording medium on which a program is recorded, the program causing a computer to execute:

25   (a)   the image input step of inputting page image

information of a document;

(b)   the graphic pattern extraction step of extracting a graphic pattern area from the page image information input in the image input step;

5   (c)   the graphic pattern layout classification step of classifying the graphic pattern area extracted in the graphic pattern extraction step on the basis of layout classification criteria defined in advance;

(d)   the color acquisition step of acquiring a

10 representative color from the graphic pattern area extracted in the graphic pattern extraction step;

(e)   the color classification step of classifying the color from the color acquisition step on the basis of color criteria defined in advance;

15   (f)   the information storing step of linking a layout classification obtained in the graphic pattern layout classification step to a color classification obtained in the color classification step and storing the classifications upon linking the classifications to the

20 page image information input in the image input step;

(g)   the command input step of giving a command to search for page image information by designating layout information of a graphic pattern in the page image information as a rectangle in a frame on a paper sheet,

25 and also designating a color for a search with respect to

the designated rectangle on the basis of the color criteria;

(h) the search processing step of classifying the rectangle in the frame on the paper sheet, which is designated in the command input step, on the basis of the layout classification criteria, searching for page image information stored upon being linked to the same layout classification, and narrowing down the page image information as a search result depending on whether the information is stored upon being linked to the same color classification as that of the color designated in the command input step; and

(i) the image display step of displaying the page image information narrowed down in the search processing step.

15. A recording medium on which a program is recorded, the program causing a computer to execute:

(a) the image input step of inputting page image information of a document;

(b) the graphic pattern extraction step of extracting a graphic pattern area from the page image information input in the image input step;

(c) the graphic pattern layout classification step of classifying the graphic pattern area extracted in the graphic pattern extraction step on the basis of layout

classification criteria defined in advance;

(d) the color acquisition step of acquiring a representative color from the graphic pattern area extracted in the graphic pattern extraction step;

5 (e) the color classification step of classifying the color from the color acquisition step on the basis of color criteria defined in advance;

(f) the information storing step of linking a layout classification obtained in the graphic pattern layout 10 classification step to a color classification obtained in the color classification step and storing the classifications upon linking the classifications to the page image information input in the image input step;

(g) the first command input step of giving a command 15 to search for page image information by designating layout information of a graphic pattern in the page image information as a rectangle in a frame on a paper sheet;

(h) the first search processing step of classifying the rectangle in the frame on the paper sheet, which is 20 designated in the first command input step, on the basis of the layout classification criteria, and searching for page image information stored upon being linked to the same layout classification;

(i) the first image display step of displaying the 25 page image information searched out in the first search

processing step;

(j)   the second input step of inquiring whether to narrow down the page image information displayed in the first image display step by colors, and if the information is to be narrowed down by colors, giving a command to narrow down the page image information by designating a color to be searched out with respect to each rectangle on the basis of the color classification criteria;

(k)   the second search processing step of narrowing down the page image information searched out in the first search processing step depending on whether the information is stored upon being linked to the same color classification as that of each rectangle designated in the second command input step; and

(l)   the second image display step of displaying the page image information narrowed down in the second search processing step.

16.   A medium according to claim 13, wherein a program for further executing the step of selecting a portrait/landscape orientation of the paper sheet at the time of a search for the page image information is recorded on the recording medium.

17.   A medium according to claim 14, wherein a program for further executing the step of selecting a portrait/landscape orientation of the paper sheet at the

time of a search for the page image information is recorded on the recording medium.

18.   A medium according to claim 15, wherein a program for further executing the step of selecting a portrait/landscape orientation of the paper sheet at the time of a search for the page image information is recorded on the recording medium.